

**REMARKS**

Claims 1-26 are pending in this application. Claim 26 has been allowed. Claims 1-15, 18-20, and 23-25 stand rejected by the office action. Claims 16, 17, 21, and 22 are objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 27-30 have been added in this response. No new matter is believed added by the present amendments.

**Rejections under 35USC102**

The examiner has rejected claims 1, 6, 10, and 12 as being anticipated by US 6,181,466 to Franzoso et al. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Claim 1 has been amended to include a limitation of providing a first optical fiber "...at least partially in a wellbore...", that is not disclosed in Franzoso et al. Applicant, therefore, asserts that amended claim 1, and the claims dependent thereon, are allowable under 35USC102 over Franzoso et al. Claim 10 has been cancelled. Claim 12 has been amended to depend on amended claim 19 that is addressed below.

**Rejections under 35USC103**

Claims 2-5, 7-9, 11, 13-15, 18-20, and 23-25 have been rejected under 35USC103(a) as being unpatentable over Franzoso et al in view of Hodgson et al, US

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6,365,891. As indicated, claims 11, 13-15, and 18 have been amended to depend on amended independent claim 19.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

As indicated above, claim 19 has been amended to include a limitation similar to that of objected to claim 21. Neither of the cited references teach or suggest at least one limitation of claim 19. For example, neither reference teaches or suggests "a fiber optical signal carrier extending at least partially into a wellbore, ..." as claimed in amended independent claim 19. Applicant asserts that independent claim 19, and the claim dependent thereon are patentable under 35USC103 over the art cited.

For the reasons cited above, applicant believes that the claims, as amended and presented herein, are patentable over the art cited, and respectfully requests a timely allowance.

Consideration of the application as amended is respectfully requested. The Commissioner is hereby authorized to charge any fee and credit any overpayment associated with this response to **Deposit Account No. 02-0429(014-28331-US)**.

Respectfully submitted,



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